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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/603,389 06/23/00 NEYMAN

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EXAMINER

WASYLCHAK, S

ART UNIT

PAPER NUMBER

2164  
DATE MAILED:

11/02/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No.	09/603389	Applicant(s)	NOYMAN et al
Examiner	WASYLCHAK	Group Art Unit	2164

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

Responsive to communication(s) filed on 6/23/00.

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

Claim(s) 1-34 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-34 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

### Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). 5/26  Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892  Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

## Office Action Summary

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togher et al (US 5,375,055).

As per claim 1,

An anonymous reading system for trading fungible instruments between traders; comprising;

- a communications network for transmitting electronic messages / abstract; fig 1,5
- a plurality of order input devices connected to the communications network each for generating electronic order messages including bid and/or offer orders and "for communication to a trader of price information received from others of said plurality of trader terminals over the network; / fig 1, 5; col 1, L 23-29; col 3, L 34-44; col 5, L 46-54; col 6, L 36-61
- at least one matching engine connected to the network for matching orders input into the system from the order input devices and for assisting in executing deals where prices are matched; / fig 1, 5; col 5, L 47-54
- market distribution means connected to the network for distributing price messages to the trader terminals, the market distribution means being responsive to the price messages and the matching engine; / fig 1, 5
- a plurality of order input device interface means, each order input device interface means having

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order input devices representing at least one trading floor connected thereto for communication of electronic order messages to the at least one matching engine and for communication of price messages and deal information messages to the connected trader terminals; wherein -the order input device interface means and the matching engine further comprise means matching and executing a plurality of orders linked together, wherein all of said linked orders are either executed together or rejected. / fig 1, 5; col 3, L 8-11. The reference fails to teach the feature of linked orders.

Official notice is taken that this feature is old and well known in the brokerage and / or retail art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by trading blocks of similar stocks at the same time and thus similar stocks should be traded at the same price at the same point in time as is expected by the buyers and sellers.

As per claim 2,

An anonymous trading system according to claim 1 wherein the means for executing a plurality of linked orders comprises means at the matching engine for matching each of the orders comprising the plurality of linked orders, and means for rejecting the linked orders if less than all the orders comprising the linked order are matched. / fig 1, 5; col 3, L 39-44; col 16: claim 7

As per claim 3,

An anonymous trading system according to claims 1 or 2 wherein the electronic order messages are invisible hit orders. / col 3, L 52-59; col 9, L 15-21

As per claim 4,

An anonymous trading system according to claim 3 wherein the hit orders are persistent. / col 3, L 52-59; col 9, L 15-21

As per claim 5,

An anonymous trading system according to claim 1,  
comprising a plurality of matching engines, said plurality of matching engines including a taker  
matching engine connected to the order input device interface means to which the order input device  
submitting the linked order is connected, wherein the means for matching each of the orders  
comprising the plurality of linked orders is located at the taker  
matching engine. / fig 1, 5; col 3, L 60-66

As per claim 6,

An anonymous trading system according to claim 1, wherein the means for matching and executing a  
plurality of linked orders comprises means for generating and sending to the matching engine an  
instruction to match and execute a plurality of linked orders. / fig 1,5; col 3, L 60-66

As per claim 7,

An anonymous trading system according to claim 6, wherein the means for generating and sending to  
the matching engine an instruction to match and execute a  
plurality of linked orders includes means for identifying each of the orders to be  
matched and means for indicating that the orders are linked. / fig 1,5; col 3, L 60-66

As per claim 8,

An anonymous trading system according to claim 1, wherein the means for changing and executing  
a plurality of linked orders comprises, at the order input device interface means to which an order  
input device submitting a linked orders connected, means  
for receiving a message from the matching engine indicating that an order is executable and means  
for completing each of the orders comprising the plurality of linked orders when executable order  
messages have been received for each of the linked orders. / fig 1, 5

As per claim 9,

An anonymous trading system according to claim 8,

wherein the means for receiving executable order messages and for completing each order comprises mean for adjusting the amount of one or more of said plurality of orders. /fig 1,5; col 4,

L 1-7

As per claim 10,

An anonymous trading system according to claim 8, wherein the means for completing each of the orders comprising the plurality of linked orders comprises means for simultaneously completing each of the linked orders. / fig 1,5; col 3, L 22-44

As per claim 11,

An anonymous trading system according to claim 1,

wherein the order input device interface means comprises means for converting a single order message input from a connected order input device into a plurality of linked orders. / fig 1,5; col 3, L 34-39

As per claim 12,

An anonymous trading system according to claim 11,

where-in the single order message input from a connected order input device comprises an order for a trade between a first and second currency pair and the order input device interface means converts the order into an order for a trade between: the second and a third currency pair and linked order for a trade between the first and the third currency pairs. / fig, 1, 5; col 4, L 34-39; col 6, L 60-63

As per claim 13,

An anonymous trading system according to claim 1, comprising at least one broking node, each broking node comprising one of said at least one matching engines and a market distribution means. / fig 1, 5

As per claim 14,

An anonymous trading system according to claim 13, comprising a plurality of said broking nodes. / fig 1, 5

As per claim 15,

An anonymous trading system for trading instruments between traders; comprising:

-a plurality of order input devices; / fig 1,5

-A network of brokers, each broker comprising a matching engine for matching bids and offers entered into the system and for assisting in executing deals where orders are matched, and market distribution means for distributing price messages to order input devices; / fig 1, 5

-a plurality of trading agents, each trading agent being connected to a broker and providing an interface between a trading floor of said order input devices and the broker to which the trading agent is connected, wherein; / fig 1, 5

-at least one of said plurality of trading agents and the broker to which it is connected include means for matching and executing joint execution orders comprising a plurality of orders linked together, wherein all of said linked orders are either executed together or rejected. / fig 1, 5; col 3, L 8-11.

The reference fails to teach the feature of linked order group execution or rejection.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lot shares.

As per claim 16,

An anonymous trading system according to claim 15, wherein each of said plurality of brokers and connected trading agents comprise said means for matching and executing joint execution

orders. / fig 1, 5; col 3, L 34-39

As per claim 17,

An anonymous trading system according to claim 16, wherein said means for matching and executing joint execution orders includes, at each trading agent, means for converting a simple order for a first transaction type input from a order input device connected to the trading agent into a joint execution order for a second and third transaction type. / fig 1, 5; col 4, L 11-20

As per claim 18,

An anonymous trading system according to claim 17,  
-wherein said first transaction type is a currency pair having first and second currencies, said second transaction type is a second currency pair comprising said first currency and a third currency and the third transaction type is a third currency pair comprising said second currency and said third currency.  
/ fig 1, 5; col 4, L 39-49; col 6, L 60-63

As per claim 19,

An anonymous trading system according to claim 13,<sup>15</sup>  
wherein the means for matching joint execution orders comprises, at the broker, means for matching each order of the compound order and, if less than all of the orders can be matched, for rejecting the joint execution order. / fig 1, 5; col 3, L 39-44; col 16: claim 7

As per claim 20,

An anonymous trading system according to claim 15,

wherein the joint execution orders are invisible hits. / col 3, L 52-59; col 9, L 15-21

As per claim 21,

An anonymous trading system according to claim 20,

wherein the joint execution orders are persistent whereby the broker stores one or more orders of the

joint execution order that cannot be matched immediately for a given time and attempts to match the stored orders with quotes subsequently entered into the system and passed to the broker. / col 3, L 52-59; col 9, L 15-21

As per claim 22,

An anonymous trading system according to claim 15,  
wherein the means for matching and executing joint execution orders comprises means at the trading agent for sending to the broker a message instructing a joint execution order. / fig 1, 2; claim 6

As per claim 23,

An anonymous trading system according to claim 15,  
wherein the means for matching and executing joint execution orders comprises means at the trading agent for receiving from the broker a message indicating that each of said orders comprising said joint execution order is executable and means for completing the joint execution order only when all orders in the joint execution order are executable. / fig 1,5; col 3, L 8-11. The reference fails to teach the feature of linked order group execution or rejection.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lot shares.

As per claim 24,

An anonymous trading system according to claim 23,  
wherein an order is executable only after the trading agent has completed a credit check on the counterpart. / col 1, L 29-48; col 2, L 3-11, 22-31

As per claim 25,

An anonymous trading system according to claim 23,  
wherein the means for matching and executing joint execution orders comprises means for adjusting  
the volume of each of the orders to correspond to the volume of the smallest executable order of the  
joint execution order. / claim 19

As per claim 26,

An anonymous trading system for trading instruments

between traders, comprising:

- a plurality of order input devices; / abstract; fig 1, 5
- a network of matching engines for matching orders comprising bids and offers and for assisting in executing deals where orders are matched; / fig 1, 5; col 1, L 23-29; col 3, L 34-44; col 5, L 46-54; col 6, L 36-61
- a plurality of market distribution means for distributing bid and offer information to trader terminals, the market distribution means being responsive to the matching engine and to bids and offers entered into the system; / fig 1, 5
- a plurality of trading agents, each trading agent being connected to one of said plurality of matching engines and providing an interface between a trading floor comprising a number of said order input devices, and the matching engine to which the trading agent is connected; wherein: / fig 1, 5; col 5, L 47-54
- at least one of said plurality of trading agents and the matching engine to which it is connected comprise means for matching and executing joint execution orders comprising a plurality of linked orders, and include means for rejecting a joint execution order if less than all the plurality of linked orders are executable. / fig 1, 5. The reference fails to teach the feature of linked joint order group execution or rejection.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lotshares.

As per claim 27,

An anonymous trading system according to claim 28,

wherein said means for executing joint execution orders comprises means for reducing the volume of each of the orders of the plurality of linked orders to the volume of, or in proportion to the volume of, the smallest executable order. / col 3, L 22-44. The reference fails to teach the feature of linked order group volume reduction.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lot shares.

As per claim 28,

An anonymous trading system according to claim 20,

wherein each of said plurality of matching engines and connected trading agents comprise said means for matching and executing joint execution orders. / fig 1, 2; col 3, L 34-44

As per claim 29,

An anonymous trading system according to claim 28,

wherein said means for matching and executing joint execution orders includes, at each of said plurality of trading agents, means for converting a simple order for a first transaction type input from a

trader terminal connected to the trading agent into a joint execution order for a second and third transaction type. / fig 1, 5; col 4, L 11-20

As per claim 30,

An anonymous trading system according to claim 29,

having first and second currencies, said second transaction type is a second currency pair comprising said first currency and a third currency and the third transaction type is a third currency pair comprising said second currency and said third currency. / fig, 1, 5; col 4, L 34-39; col 6, L 60-63

As per claim 31,

An anonymous trading system for trading synthesized currency pairs between traders comprising:

-a plurality of order input devices; / abstract; fig 1, 5; col 1, L 23-29; col 3, L 34-44; col 5, L 46-54; col 6, L 36-61

-a network of matching engines, each matching engine matching bid and offer orders entered into the system and assisting in the execution of deals where bid and offer orders have been matched;

market distribution means for distributing information "relating to bid and offer orders in the a system to the trader terminals; / fig 1, 5; col 5, L 47-54

-a plurality of trading agents, each of said plurality of trading agents being connected to one of the network of matching engines and providing an interface between a trading floor of said plurality of quote input devices and the matching engine to which the trading agent is connected; / fig 1, 5; col 1, L 23-29; col 3, L 34-44; col 5, L 46-54; col 6, L 36-61

- means for synthesizing bid and offer orders for transactions between a pair of currencies having a first currency and a second currency from bid and offer orders entered into the system for transactions between a currency pair comprising the first currency and a third currency and bid and offer orders entered into the system for transactions between a currency pair comprising the second currency and the third currency; / fig 1, 5; col 4, L 39-49; col 6, L 60-63

-means at the matching engines and the trading agents connected thereto for matching and executing joint execution orders comprising a plurality of orders linked together wherein all of said linked orders are either executed together or rejected, and wherein; / col 3, L 1-11, 60-66. The reference fails to teach the feature of linked order group execution or rejection.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lot shares.

- the trading agents further include means for converting a bid or offer order in said synthetic currency pair into a joint execution order comprising a order in each of said currency pair comprising the first and third currency and said currency pair comprising the second and third currency / fig 1, 5; col 4, L 39-49; col 6, L 60-63

As per claim 32,

An anonymous trading system according to claim 32,

wherein said bid or offer order in said synthetic currency pair is an invisible order. / abstract; fig 1, 5; claim 3

As per claim 33,

An anonymous trading system according to claim 32,

wherein said bid or offer order in said synthetic currency pair is a persistent order. / abstract; fig 1, 5; claim 4

As per claim 34,

An anonymous trading system for trading instruments between traders; comprising:  
-a plurality of trader terminals; / abstract; fig 1, 5

-A network of brokers, each broker comprising a matching engine for matching bid and offer orders entered into the system and for assisting in executing deals where orders are matched, and market distribution means for distributing price messages to trader terminals; / fig 1, 5; col 1, L 23-29; col 3, L 34-44; col 5, L 46-54; col 6, L 36-61

-a plurality of trading agents, each trading agent being connected to a broker and providing an interface between a trading floor of said trader terminals and the broker to which the trading agent is connected; / fig 1, 5; col 3, L 8-11.

-wherein the trading agents each further comprise means for entering compound orders comprising a series of bid or offer orders and a deal limit, wherein the sum of the orders is greater than the deal limit, and the brokers each comprise means for canceling the orders in the compound order when an amount equal to the deal limit has been executed. / col 3, L 60-66; col 4, L 7-11. The reference fails to teach the feature of linked order group execution or rejection.

Official notice is taken that this feature is old and well known in the brokerage art as analogous to a stop limit order. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement this feature for the advantage of efficiency by negating the use of a market specialist to buy or sell odd lot shares.

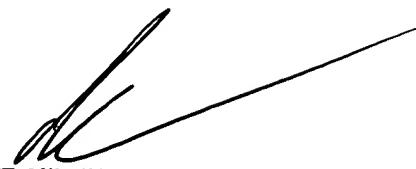
This action is **NON-FINAL**. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Wasylchak whose telephone number is (703) 308-2848. The examiner can normally be reached on Monday-Thursday from 6:30 a.m. to 6:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin, can be reached at (703) 308-1065. The fax number for Art Unit 2164 is (703) 308-1396.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Steven Wasylchak

10/26/01



VINCENT MILLIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100